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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
RAMPURIA, SHARAD K	
ART UNIT	**PAPER NUMBER**
2617	

MAIL DATE	DELIVERY MODE
06/25/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/789,571	RADIC ET AL.	
	Examiner	Art Unit	
	Sharad Rampuria	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35.U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 April 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4 and 6-34* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4 and 6-34* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

I. The Art Unit location of your application in the USPTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Art Unit 2617.

Disposition of the claims

II. The current office-action is in response to the Applicant Arguments/Remarks Made in an Amendment filed on 04/16/2007.

Accordingly, Claim 5 is cancelled, thus, Claims 1-4, 6-34 are imminent for further assessment as follows:

Claim Rejections - 35 USC § 103

III. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-4, 6-7, 11-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ayoub et al. [US 6477363] in view of Laird et al. [US 20050075116].

As per claim 1, Ayoub teaches:

In a mobile station, a method of facilitating the determination of Global Positioning System (GPS) location information without disrupting voice communications of a voice call involving the mobile station (Abstract and Col.1; 60-64) comprising the acts of:

Causing GPS navigational-type data to be received through a wireless transceiver of the mobile station and stored in memory of the mobile station prior to voice communications of a voice call involving the mobile station; (i.e. locating the cellular phone like triangulation would apply. The GPS receiver comprises a GPS antenna 11 which feeds the received signals from the satellites into a GPS module 12 calculating the position of the mobile telephone resulting in a data item for longitude and latitude, resp; Col.4; 2-12, Col.2; 1-15)

Receiving through a user interface of the mobile station, a voice call request for a voice call by an end user; (i.e. the communication between the mobile phone and the authority is established; Col.4; 20-35)

In response to receiving the voice call request: deriving GPS assistance data based on the stored GPS navigational-type data; tuning the wireless transceiver to a GPS

frequency to receive signals from a GPS system through the wireless transceiver; (i.e. capture the position of mobile; Col.4; 2-19, Col.5; 4-8)

Causing a GPS fix to be performed with signals from a GPS system through a wireless transceiver using the GPS assistance data to thereby obtain GPS measurement data; (i.e. capture the position of mobile; Col.4; 20-35) and

After the GPS fix is performed, causing the voice call to be established and maintained for the mobile station through the wireless communication network with the wireless transceiver; (i.e. the voice-call connection is continued; Col.4; 48-57)

Ayoub doesn't teach specifically, during the voice call, causing the GPS measurement data and a request for calculating a location of the mobile station to be transmitted to a location server in the wireless communication network for calculating the location of the mobile station based on the GPS measurement data. However, Laird teaches in an analogous art, that during the voice call, causing the GPS measurement data and a request for calculating a location of the mobile station to be transmitted to a location server in the wireless communication network for calculating the location of the mobile station based on the GPS measurement data. (i.e. calculating a location of the mobile station; ¶ 0080, 0036) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Ayoub including during the voice call, causing the GPS measurement data and a request for calculating a location of the mobile station to be transmitted to a location server in the wireless communication network for calculating the location of the mobile station based on the GPS measurement data in order to provide methods and apparatus for providing secondary notifications to third parties of potential emergencies detected by wireless handsets. (¶ 0005)

As per claim 2, Ayoub teaches:

The method of claim 1, wherein the voice call comprises a 911 emergency call.

(e.g. 911; Col.5; 1-8 and Col.1; 60-64)

As per claim 3, Ayoub teaches:

The method of claim 1, wherein the act of causing the GPS navigational-type data to be received and stored in memory of the mobile station comprises the further acts of regularly causing the GPS navigational-type data to be received and stored in the memory during one or more time periods that the mobile station would have otherwise been in an idle mode of operation. (i.e. the position data is acquired repetitively in constant time intervals, e.g. every five minutes, and is stored in a controller 13 together with a time stamp representing the time of position acquisition; Col.4; 12-19)

As per claim 4, Ayoub teaches:

The method of claim 1, wherein the act of causing the GPS navigational-type data to be received comprises the further act of causing the GPS navigational-type data to be received from the location server. (Col.4; 48-57)

As per claim 6, Ayoub teaches:

The method of claim 1, further comprising: identifying a trigger signal indicative of the voice call request at the mobile station; wherein the act of identifying the trigger signal includes at least one of the following: identifying a detection of the mobile station

being taken out of a holster, identifying a selection of a phone application of the mobile station, identifying a selection of one or more digits of a telephone number for the voice call, identifying a selection of entry of the telephone number for the voice call, and receiving the trigger signal from a personal computer (PC) or laptop. (i.e. Upon activation of the emergency call by typing 911 on the keypad of the handset or by pressing a panic button, the cellular phone generates the DID number that corresponds to the position obtained from the GPS module.; Col.5; 17-38 and Col.3; 5-17)

As per claim 7, Ayoub teaches:

The method of claim 1, further comprising: identifying a phone number of the voice call; and wherein the act of causing the GPS fix to be performed is contingent on the phone number of the voice call. (i.e. The central office saves the DID and passes the call to a controller 24 which is able to perform automatic number identification (ANI) and/or evaluate the mobile identification number (MIN).; Col.5; 23-38)

As per claim 11, Ayoub teaches:

The method of claim 1, wherein the location server includes a Position Determination Entity (PDE). (i.e. Col.3; 66-Col.4; 12)

As per claim 12, Ayoub teaches:

The method of claim 1, further comprising: receiving the location of the mobile station from the location server through the wireless communication network. (Col.4; 36-47)

As per claim 13, Ayoub teaches:

The method of claim 1, further comprising: refraining from causing the GPS fix to be performed during the voice communications of the voice call. (Col.4; 20-35)

As per claim 14, Ayoub teaches:

The method of claim 1, wherein at least a portion of the same wireless receiver is utilized for both acts of performing the GPS fix and causing the voice call to be established and maintained. (Col.4; 48-57)

As per claims 15, 28, Ayoub teaches:

A mobile station (1; Fig.1, Col.3; 66-Col.4; 2), comprising:

A user interface; (keypad; Col.4; 15-19)

A wireless receiver and transmitter; (15; Fig.1; Col.4; 15-19)

One or more processors coupled to the wireless receiver and transmitter; memory coupled to the one or more processors; (13; Fig.1; Col.4; 12-14)

The one or more processors being operative to facilitate the determination of Global Positioning System (GPS) location information of the mobile station by: Causing GPS navigational-type data to be received through a wireless transceiver of the mobile station and stored in memory of the mobile station prior to voice communications of a voice call involving the mobile station; (i.e. locating the cellular phone like triangulation would apply. The GPS receiver comprises a GPS antenna 11 which feeds the received signals from the satellites into a GPS module 12 calculating the position of the mobile

telephone resulting in a data item for longitude and latitude, resp; Col.4; 2-12, Col.2; 1-15)

Receiving through a user interface of the mobile station, a voice call request for a voice call by an end user; (i.e. the communication between the mobile phone and the authority is established; Col.4; 20-35)

In response to receiving the voice call request: deriving GPS assistance data based on the stored GPS navigational-type data; tuning the wireless transceiver to a GPS frequency to receive signals from a GPS system through the wireless transceiver; (i.e. capture the position of mobile; Col.4; 2-19, Col.5; 4-8)

Causing a GPS fix to be performed with signals from a GPS system through a wireless transceiver using the GPS assistance data to thereby obtain GPS measurement data; (i.e. capture the position of mobile; Col.4; 20-35) and

After the GPS fix is performed, causing the voice call to be established and maintained for the mobile station through the wireless communication network with the wireless transceiver; (i.e. the voice-call connection is continued; Col.4; 48-57)

Ayoub doesn't teach specifically, during the voice call, causing the GPS measurement data and a request for calculating a location of the mobile station to be transmitted to a location server in the wireless communication network for calculating the location of the mobile station based on the GPS measurement data. However, Laird teaches in an analogous art, that during the voice call, causing the GPS measurement data and a request for calculating a location of the mobile station to be transmitted to a location server in the wireless communication network for calculating the location of the

mobile station based on the GPS measurement data. (i.e. calculating a location of the mobile station; ¶ 0080, 0036)

As per claims 16, 29, Ayoub teaches:

The mobile station of claims 15, 28, wherein the voice call comprises a 911 emergency call. (Col.5; 1-8 and Col.1; 60-64)

As per claim 17, Ayoub teaches:

The mobile station of claim 15, wherein the causing of the GPS navigational-type data to be received and stored in the memory is performed on a regular basis during one or more time periods that the mobile station would have otherwise been in an idle mode of operation. (i.e. the position data is acquired repetitively in constant time intervals, e.g. every five minutes, and is stored in a controller 13 together with a time stamp representing the time of position acquisition; Col.4; 12-19)

As per claim 18, Ayoub teaches:

The mobile station of claim 15, wherein the causing of the GPS navigational-type data to be received comprises causing the GPS navigational-type data to be received from the location server through the wireless communication network. (Col.4; 48-57)

As per claim 19, Ayoub teaches:

The mobile station of claim 15, further comprising: identifying a trigger signal indicative of the voice call request at the mobile station; wherein the act of identifying the

trigger signal includes at least one of the following: identifying a detection of the mobile station being taken out of the holster, identifying a selection of a phone application of the mobile station, identifying a selection of one or more digits of a telephone number for the voice call, identifying a selection of entry of the telephone number for the voice call, and receiving the trigger signal from a personal computer (PC) or laptop. (i.e. Upon activation of the emergency call by typing 911 on the keypad of the handset or by pressing a panic button, the cellular phone generates the DID number that corresponds to the position obtained from the GPS module.; Col.5; 17-38 and Col.3; 5-17)

As per claim 20, Ayoub teaches:

The mobile station of claim 15, wherein the one or more processors are further operative to: identify a phone number of the voice call; and wherein the act of performing the GPS fix is contingent on the phone number of the voice call. (i.e. The central office saves the DID and passes the call to a controller 24 which is able to perform automatic number identification (ANI) and/or evaluate the mobile identification number (MIN).; Col.5; 23-38)

As per claim 21, Ayoub teaches:

In a mobile station, a method of facilitating the determination of Global Positioning System (GPS) location information without disrupting voice communications of a voice call (Abstract and Col.1; 60-64) comprising the acts of:

Identifying a trigger signal indicative of a request to terminate a voice call which is maintained for the mobile station; in response to identifying the trigger signal: (i.e. a panic button; Col.4; 15-19)

Tuning the wireless transceiver to a GPS frequency to receive signals from a GPS system through the wireless transceiver; (i.e. capture the position of mobile; Col.4; 2-19, Col.5; 4-8)

Causing a GPS fix to be performed with a GPS system using GPS assistance data to thereby obtain GPS measurement data; (i.e. capture the position of mobile; Col.4; 20-35)

Ayoub doesn't teach specifically, during the voice call, causing the GPS measurement data and a request for calculating a location of the mobile station to be transmitted to a location server in the wireless communication network for calculating the location of the mobile station based on the GPS measurement data. However, Laird teaches in an analogous art, that during the voice call, causing the GPS measurement data and a request for calculating a location of the mobile station to be transmitted to a location server in the wireless communication network for calculating the location of the mobile station based on the GPS measurement data. (i.e. calculating a location of the mobile station; ¶ 0080, 0036)

As per claim 22, Ayoub teaches:

The method of claim 21, wherein the voice call comprises a 911 emergency call. (Col.5; 1-8 and Col.1; 60-64)

As per claim 23, Ayoub teaches:

The method of claim 21, further comprising: causing the GPS assistance data to be received in response to identifying the trigger signal. (i.e. Upon activation of the emergency call by typing 911 on the keypad of the handset or by pressing a panic button, the cellular phone generates the DID number that corresponds to the position obtained from the GPS module.; Col.5; 17-38 and Col.3; 5-17)

As per claim 24, Ayoub teaches:

The method of claim 21, further comprising: refraining from causing the GPS fix to be performed during the voice communications of the voice call. (Col.4; 20-35)

As per claim 25, Ayoub teaches:

The method of claim 21, wherein at least a portion of the same wireless receiver is utilized for performing the GPS fix and maintaining the voice call. (Col.4; 48-57)

As per claim 26, Ayoub teaches:

The method of claim 21, further comprising: identifying a phone number of the voice call; and wherein the acts of causing a GPS fix and causing the GPS measurement data to be transmitted before ending the voice call is contingent on the phone number for the voice call. (i.e. The central office saves the DID and passes the call to a controller 24 which is able to perform automatic number identification (ANI) and/or evaluate the mobile identification number (MIN).; Col.5; 23-38)

As per claim 27, Ayoub teaches:

The method of claim 21, wherein the trigger signal is based on an actuation of an END key. (i.e. a panic button.; Col.5; 17-38 and Col.3; 5-17)

As per claim 30, Ayoub teaches:

The mobile station of claim 28, wherein the one or more processors are further operative for: causing the GPS assistance data to be received in response to identifying the trigger signal. (i.e. Upon activation of the emergency call by typing 911 on the keypad of the handset or by pressing a panic button, the cellular phone generates the DID number that corresponds to the position obtained from the GPS module.; Col.5; 17-38 and Col.3; 5-17)

As per claim 31, Ayoub teaches:

The mobile station of claim 28, wherein the one or more processors are further operative for: refraining from causing the GPS fix to be performed during the voice communications of the voice call. (Col.4; 20-35)

As per claim 32, Ayoub teaches:

The mobile station of claim 28, wherein at least a portion of the same wireless receiver is utilized for performing the GPS fix and maintaining the voice call. (Col.4; 48-57)

As per claim 33, Ayoub teaches:

The mobile station of claim 28, wherein the one or more processors are further operative for: identifying a phone number of the voice call; and wherein the acts of causing the GPS fix and causing the GPS measurement data to be transmitted before ending the voice call is contingent upon the phone number for the voice call. (i.e. The central office saves the DID and passes the call to a controller 24 which is able to perform automatic number identification (ANI) and/or evaluate the mobile identification number (MIN).; Col.5; 23-38)

As per claim 34, Ayoub teaches:

The mobile station of claim 28, wherein the trigger signal is based on an actuation of an END key at the user interface. (i.e. a panic button.; Col.5; 17-38 and Col.3; 5-17)

Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ayoub & Laird further in view of Leung [US 6907238].

As per claim 8, the above combination teaches all the particulars of the claim except wherein the GPS navigational-type data comprises GPS ephemeris data and/or GPS almanac data. However, Leung teaches in an analogous art, that the method of claim 1, wherein the GPS navigational-type data comprises GPS ephemeris data and/or GPS almanac data. (i.e. ephemeris data and almanac data; Col.1; 30-35) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the

above combination including the GPS navigational-type data comprises GPS ephemeris data and/or GPS almanac data in order to provide a method and apparatus to facilitate the locating and tracking of a wireless terminal, which may be advantageously used for E-911 service.

As per claim 9, the above combination teaches all the particulars of the claim except wherein the GPS assistance data comprises at least one of: GPS satellite PseudoRandom Noise (PRN) code identifying data, Doppler frequency data, time delay window data, and bit contents of the GPS navigational data. However, Leung teaches in an analogous art, that method of claim 1, wherein the GPS assistance data comprises at least one of: GPS satellite PseudoRandom Noise (PRN) code identifying data, Doppler frequency data, time delay window data, and bit contents of the GPS navigational data. (i.e. ephemeris data and almanac data; Col.8; 23-28)

As per claim 10, the above combination teaches all the particulars of the claim wherein the GPS measurement data comprises GPS pseudorange data. However, Leung teaches in an analogous art, that the method of claim 1, wherein the GPS measurement data comprises GPS pseudorange data. (i.e. pseudorange data; Col.3; 67-Col.4; 7)

Response to Amendment

IV. Applicant's arguments with respect to claims 1-4, 6-34 has been fully considered but is moot in view of the new ground(s) of rejection.

Conclusion

V. Applicant's amendment (For illustration; Claim 1; during the voice call … based on the GPS measurement data) necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sharad Rampuria whose telephone number is (571) 272-7870. The examiner can normally be reached on M-F. (8:30-5 EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on (571) 272-7495. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://portal.uspto.gov/external/portal/pair. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or *EBC@uspto.gov*.

/Sharad Rampuria/
Patent Examiner
Art Unit 2617

GEORGE ENG
SUPERVISORY PATENT EXAMINER